

REMARKS

Claims 1 – 12 are pending and stand rejected. Claims 1, 3, 6, and 7 were rejected under 35 U.S.C. 102(e) as being anticipated by US Patent Application 2002/0074598A1 to Doyle et al. (“Doyle”); claim 2 was rejected under 35 U.S.C. 103(a) as being unpatentable over Doyle in view of U.S. Patent 4,069,094 issued to Shaw et al. (“Shaw”); claims 4 and 5 were rejected under 35 U.S.C. 103(a) as being unpatentable over Doyle; and claims 8 and 9 – 12 were rejected under 35 U.S.C. 103(a) as being unpatentable over Doyle in view of U.S. Patent 6,759,717 issued to Sagarwala (“Sagarwala”).

Claims 1, 3, 6, and 7 were rejected under as being anticipated by Doyle. Specifically, Examiner has asserted that Figure 7 of Doyle discloses a device having an impurity region 56 laterally spaced from the source and drain regions. Applicants respectfully traverse. The impurity region 56 of Figure 7 of Doyle is not laterally spaced from the source and drain regions – but rather is substantially aligned with the source and drain regions. A careful review of Doyle’s description of Figure 7 establishes this to be the case. 7 Doyle states, “a mask 52 is formed on a substrate 50 using conventional photoresist techniques, such that the region of the substrate 50 that will eventually be the channel region of NMOS device is exposed (See Figure 5). Then, helium is implanted to form voids 56 in the exposed region.” See Doyle at Paragraph 39 (emphasis added). Doyle describes, the voids are formed in the channel region, which clearly is aligned with and abuts the source and drain regions (See Figure 7). As such, the impurity region of Doyle is not laterally spaced from the source and drain regions.

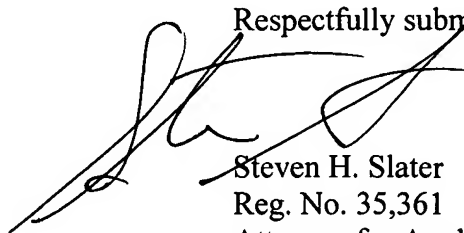
As an aid to Examiner, Applicants have attached to this response (as Exhibit A) a copy of Figure 7 of Doyle wherein Applicants have drawn in vertical lines A and B. Line A is a straight line that extends along the outer edge of gate 62 and the aligned inner edge of source 58. As clearly shown, this straight line also intersects the impurity region 56 – demonstrating that impurity region 56 is aligned with source region 58. Line B is a straight line that extends along the (other) outer edge of gate 62 and the aligned inner

edge of drain 60. As shown, this straight line also intersects the impurity region 56 – demonstrating that impurity region 56 is aligned with drain region 60. In neither instance is the impurity region “laterally spaced from” the source and drain regions.

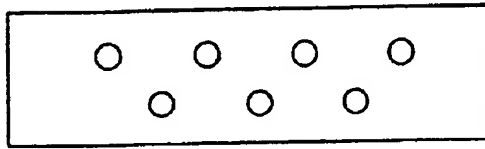
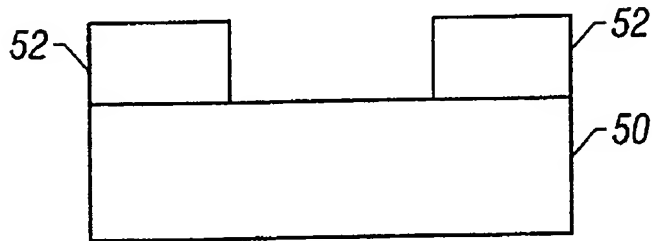
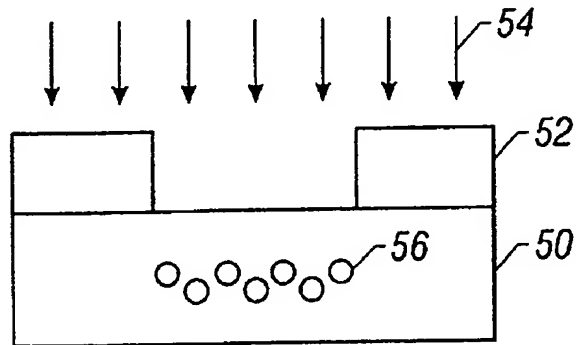
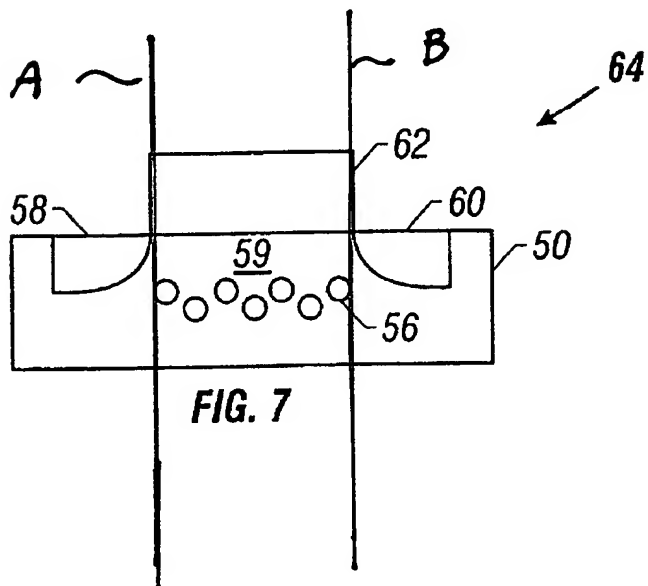
No other Figure in Doyle shows an impurity region that is laterally spaced from the source and drain regions as is required in claim 1, and each of claims 2 – 12 which depend therefrom. Examiner’s withdrawal of previous rejections of the claims on the basis of Doyle indicates Examiner has previously acquiesced on this point. Having shown herein that Figure 7 of Doyle fails to teach or suggest the claim limitation, Applicants respectfully submit that claim 1 and its dependent claims 2 – 12 are patentably distinct over Doyle. Because Doyle fails to anticipate or render obvious claim 1, Applicants will not address herein the additional distinguishing features of dependent claims 2 – 12 over the prior art. Applicants failure to do so should not be interpreted as agreement with Examiner’s assertion, however, and Applicants reserve the right to raise such distinguishing features, should Examiner raise additional or other grounds for rejection.

Applicants thank Examiner for the thorough analysis of the pending application and respectfully request reconsideration and withdrawal of the rejection of claims 1 – 12 and that the present application be promptly passed to issuance. Examiner is invited to contact the undersigned with any questions regarding this application.

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Respectfully submitted,

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**FIG. 4****FIG. 5****FIG. 6****FIG. 7**